

VERTICAL AXIS WIND TURBINE AND WIND TURBINE BLADE

ABSTRACT

It is an object of the invention is to provide a vertical axis wind turbine and a wind turbine blade, which are excellent in self-starting performance and have a high torque constant.

Since the present invention comprises a wind receiving plate 40 having a wind receiving surface and an openable and closable pivot 42, which wind receiving plate 40 is operated to close in the direction in which the centrifugal force is produced in proportion to the revolution of a blade 18 generating a lifting power; and an energizing means (such as spring 44) for energizing an opening force to open the wind receiving plate to the wind receiving side, the starting performance of the lift type wind turbine can be improved by means of the wind receiving plate 40, which opens at a low revolution of the blade 18 so as to function as a drag type wind turbine, and automatically closes at a high revolution of the blade 18 so as to function as a lift type wind turbine.